

Hyatt v. Callison RTKL, Inc. Investigation

**Mark T. Kilgore, Ph.D., P.E.
Principal Engineer**

March 10, 2020

Probe Case No. VA-2019-10-001

Probe Forensic Engineering, LLC

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Introduction

Probe Forensic Engineering, LLC. (Probe) was asked to perform an investigation and analysis involving the design and layout of a smoke/fire alarm system in a hotel that allegedly was defective.

A guest at the subject property reportedly sustained hearing damage as a result of the smoke/fire alarm system being set off by steam from a shower that was adjacent to the smoke/fire alarm sensors.

The purpose of Probes' investigation and analysis was to review the applicable codes, contracts, and drawings to ascertain the extent to which the architects' and its subconsultants designs caused or contributed to the October 22, 2017, nuisance alarm at issue in this matter.

Background

On or about October 21, 2017, Tzann Fang, MD (Plaintiff) and his wife were guests at the Hyatt Regency Hotel located at 7901 Tysons One Place, Tysons Corner, Virginia. The subject property was owned by Tysons Corner Hotel Plaza, LLC (Owner), and was operated by the Hyatt Corporation (Hyatt).

The subject property was designed and constructed under what is known as a design/bid/build project delivery method, in that the design and construction aspects of the project are completed by at least two separate parties.

RTKL Associates, Inc. (RTKL) was the architect of record for the design of the subject property, having been retained by the Owner in February 2010. The general

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contractor for the construction of the subject property was Harvey-Cleary Builders (HCB) of Gaithersburg, MD, under a contract with the Owner. HCB subcontracted the smoke detectors and fire alarm system portion of the construction project to Helix Electric (Helix).

Plaintiff claims that while his wife was taking a shower, the fire alarm in the room mounted on the wall adjacent to the bathroom was activated. As a result of being exposed to the sound of the fire alarm for a period of approximately 8-10 minutes, the Plaintiff allegedly suffered the onset of Tinnitus.

Investigation

Probes' investigation included a review of the following written materials:

1. Complaint, dated September 9, 2019;
2. Third-party complaint dated September 9, 2019;
3. Expert reports:
 - a. Daryl L. Ebersole, P.E., dated January 31, 2020;
 - b. Associated Acoustics, Inc., dated January 15, 2020;
 - c. Audiological Associates, Inc., dated November 13, 2019;
4. Contract between RTKL Associates, Inc. and Tysons Corner Holdings, LLC, dated February, 2010;
5. Tysons Hotel Project Manual, dated March 29, 2013, as produced by RTKL;
6. Bindings 3, 4, and 5 containing construction drawings as prepared by RTKL, March 29, 2013;
7. Drawing index, as prepared by RTKL, dated March 29, 2013;

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8. Contract between Harvey-Cleary Builders and the Owner, dated February 25, 2013;
9. Blum Consulting Engineers, Inc. proposal as submitted to RTKL Associates, dated November 21, 2011;
10. Subcontract between RTKL and Blum Consulting Engineers, dated February 15, 2012;
11. Hyatt Hotels Standard Design Criteria dated March, 2008;
12. Life Safety Analysis as submitted by Code Consultants, Inc., to RTKL dated July 12, 2012;
13. International Building Code 2009 edition (IBC 2009);
14. NFPA 72, National Fire Alarm and Signaling Code, dated August 22, 2011;
15. Cut sheet for Simplex 4098-9714 Sensor;
16. Harvey Cleary Inspection Coordination Meeting Minutes dated August 18, 2014;
17. RTKL RFI-0527 dated June 18, 2014;
18. RTKL RFI-527R dated July 16, 2014;
19. Email from Ron Hunt of Capitol Sprinklers to Sergio Merino of Harvey-Cleary Builders, dated July 18, 2014;
20. Email from Hamid Zand of Simplex-Grinnell to Wade Wood of Helix Electric dated June 19, 2014, 1:20 p.m.;
21. Email, containing attachment (1'3" separation, 1'0" down from ceiling), from Jenna Higginbotham of Looney & Associates to Jeff Guy of Harvey-Cleary Builders dated June 19, 2014, 2:36 p.m.;

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22. Email, containing attachment (1'3" separation, 10" down from ceiling), from Jenna Higginbotham of Looney & Associates to Jeff Guy of Harvey-Cleary Builders and Kristen Vican of RTKL dated June 19, 2014 at 2:42 p.m.;
23. Email, containing attachment (3'0" separation), from Jenna Higginbotham of Looney & Associates to Jeff Guy of Harvey-Cleary Builders and Kristen Vican of RTKL dated June 19, 2014 at 2:44 p.m.;
24. CRTKL09858 (DWB ID5.33 Revision 7, March 5, 2014 Permit Set).

International Building Code 2009 edition

- **"310.1 Residential Group R.** Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not registered by the International Residential Code in accordance with Section 101.2. Residential occupancies shall include the following:
 - R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including: Boarding houses (transient) Hotels (transient) Motels (transient)."
- **"[F] 907.2.10.1 Where required.** Single or multiple-station smoke alarms shall be installed in the locations described in Sections 907.2.10.1.1 through 907.2.10.1.3."
- **"[F] 907.2.10.1.1 Group R-1.** Single or multiple-station smoke alarms shall be installed in all of the following locations in Group R-1: 1. In sleeping areas."
- **"[F] 907.2.11 Single- and multiple-station smoke alarms.** Listed single- and

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multiple-station smoke alarms complying with UL 217 shall be installed in accordance with Sections 907.2.11.1 through 907.2.11.4 and NFPA 72.

Life Safety Analysis as submitted by Code Consultants, Inc., to RTKL dated July 12, 2012

- "In addition, single or multiple-station smoke alarms will be installed in each guestroom in the following locations: Sleeping areas."

NFPA 72, National Fire Alarm and Signaling Code, dated August 22, 2011

- "17.7.1.6 Smoke detectors shall be installed in all areas where required by other governing laws, codes, or standards or by other parts of this Code."
- "17.7.3.2.1 Spot-type smoke detectors shall be located on the ceiling or, if on a sidewall, between the ceiling and 12 in. (300 mm) down from the ceiling to the top of the detector. 17.7.3.2.2."

Cut sheet for Simplex 4098-9714 Sensor

- "**Warning:** In most fires, hazardous levels of smoke and toxic gas can build up before a heat detection device would initiate and alarm. In cases where Life Safety is a factor, the use of smoke detection is highly recommended."
- "Sensor locations should be determined after careful consideration of the physical layout and contents of the area to be protected. Refer to NFPA 72, the *National Fire Alarm and Signaling Code*."

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Expert report of Daryl L. Ebersole, P.E.

- “Helix Electric failed to install the box for the smoke detector at the location shown on the drawings. Helix Electric’s failure to follow the design was a cause of the false activation of the smoke detector in Room 613 at the time of the incident.”
- “If Helix Electric had properly located the box in accordance with the drawings the false alarm activation from steam would have been prevented.”
- “The National Electrical Code requires the installer to follow the manufacturer instructions: Article 110 Requirements for Electrical Installations.... 110.3 Examination, Identification, Installation, and Use of Equipment...(B) Installation and Use. Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling.”
- “Helix Electric’s failure to follow manufacturer instructions was a violation of the National Electrical Code.”
- “Helix Electric failed to follow the requirements of the National Fire Protection Association NFPA 72 and this was a cause of the false alarm activation of the smoke detector in Room 613 at the time of the incident.”

Contract between RTKL Associates, Inc. and Tysons Corner Holdings, LLC, dated February 2010

- “**2.8 Construction Means, Methods and Safety:** Save and except if the Architect or a Subconsultant is demonstrated to have breached an express obligation of this Agreement, violated an Applicable Law, been guilty of willful misconduct or violated the standard of care set forth in Section 1.3 and

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then only to the extent of such breach, willful misconduct or violation, Architect shall have no responsibility or liability with regard to, and Contractor and the Separate Contractors shall be solely responsible for all selections (other than those selections expressly dictated by Architect or the Subconsultants in the Design Documents) of and all supervision, implementation and enforcement relating to, construction means, methods, sequences, techniques, procedures or related matters involving health and safety of persons or protection of property at the Site during construction.

Contract between Harvey-Cleary Builders and the Owner, dated February 25, 2013

- “1.2.12 Diagrammatic Portions. Drawings and diagrams for mechanical, plumbing, electrical, fire sprinkler, fire alarm and low voltage Work shall be considered as diagrammatic only and shall not be used for any structural guidance or physical layout. Contractor shall be responsible to provide any and all numbers and lengths of fittings, wire, conduit, connectors, attachments or similar materials or devices needed to complete the Work, without Contract Adjustment, whether or not they exceed the numbers of pieces or the lengths indicated by the Drawings. Contractor is solely responsible to carefully plan and coordinate in advance by means of coordination drawings the installation of any Work shown diagrammatically so as to make maximum use of the space available and so as to anticipate and avoid wherever possible conflict and interferences among such portions of the Work and with other portions of the Work, including structural members.”

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Email from Wade Wood of Helix Electric to Hamid Zand of Simplex-Grinnell
dated June 19, 2014, 12:59 p.m.

- “Hamid, please review attached. The Architect has issued this detail and wants these devices for the guest rooms located as shown on the attached sketch. We do not see a problem with these locations meeting all requirements, But I wanted to have you take a look and see if you know of any issues with this placement.”

Email from Hamid Zand of Simplex-Grinnell to Wade Wood of Helix Electric
dated June 19, 2014, 1:20 p.m.

- “Wade, it looks fine, per NFPA 13 the minimum distance between sprinkler head to a device should be at least 3 times the size (width or diameter) of a device. For instance our smoke detectors are 5.5” diameter which will require the sprinkler to be at least 15” away to avoid any obstruction to water spray path.”

Email from Ron Hunt of Capitol Sprinklers to Sergio Merino of Harvey-Cleary
Builders, dated July 18, 2014

“Per our discussion yesterday concerning the location of the sidewall sprinklers in the guest rooms and their relationship with the smoke detector and the strobe, I have spoken with Sam Singh Fairfax County and he has determined the following requirements:

- The sidewall sprinkler must be no closer than 3' from the edge of the smoke detector. Per our discussion yesterday the sidewall sprinkler cannot be more than 8'-0" from a wall perpendicular to the wall the sprinkler is mounted on. He cited the section 8.10.7.1.4 along with the corresponding table and figure.”

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Harvey Cleary Inspection Coordination Meeting Minutes dated August 18, 2014

- “1.1 Guest Room Life Safety Device Layout: (8/8/2014) Guest room life safety device locations. HCB provided photographs (attached) of the typical guest room life safety device configurations at the guestroom soffit side-walls; including horn-strobes, sprinkler heads, and smoke detectors. FFX confirmed that the requirement for adjacent devices be 36” clear from the sprinkler head horizontally is applicable only to the smoke detector mounted at the same elevation as the sprinkler head. The horn-strobe, which is located approximately 9” below the sprinkler head, is permitted to be installed within this 36” area, as it does not impeded upon the water flow or spray pattern of the side-wall sprinkler head.”

Facility Inspection

Probe has not conducted any inspection(s) of the subject property. It was determined by Probe that a review of documents provided by counsel, and others, was sufficient to provide an opinion within my scope of review. The as-built location of the subject smoke alarm was documented in an expert report provided to Probe and listed herein.

Discussion

Role of the Design Professional

To facilitate the design of a building project, architects, engineers, and interior designers, collectively known as design professionals, utilize their education, experience, and expertise to produce construction plans that are used by contractors

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in the course of constructing said project. Construction plans/drawings, as prepared by the design professional, are expected to address the following, and as stipulated contractually:

1. Owners' wishes regarding form and function
2. Building and other code requirements for the locality in which the project is located
3. Owners' budget requirements
4. Direction to subconsultants and contractors for the design and construction of embedded systems

As the architect of record is typically the first contact for the design of a building project, they take the lead in managing the design of the building. As such, the architect is in overall charge of every aspect of the building design. This does not mean that the architect designs every system of a building project. Sub-consultants possessing the requisite skills for the design of the various systems are retained by the architect. Sub-consultants typically include:

- Civil Engineers
- Structural Engineers
- Electrical Engineers
- Fire protection engineers
- Interior designers
- Lighting designers

The architect will coordinate the work of the sub-consultants so that the work of all of the sub-consultants complement each other. A sub-consultant is expected to produce a design of their respective system(s) that is compliance with adopted codes

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and accepted standards governing the design and construction of buildings located within the jurisdiction where the project is located. Of added note, a sub-consultant to an architect, as described herein, within the confines of a design/bid/build delivery method, does not provide materials or labor to fabricate or install the systems that are designed under their agreement with an architect.

RTKL provided diagrammatic drawings that depicted placement of the fire/smoke alarm components within the guest rooms. Diagrammatic drawings, as produced by an architect, are not intended to direct the general contractor or subcontractors as to the final placement or orientation of any specific MEP system component. The general contractor, in concert with MEP subcontractors, utilizing adopted codes and standards, and final approval of the building official, will coordinate the final placement/orientation of components contained in smoke/fire alarm systems.

In as much as RTKL was responsible for the coordination of the sub-consultants, RTKL was not contractually obligated, under a design/bid/build project delivery method, to direct the means and methods of HCB. Additionally, per its' contract with HCB, RTKL was not responsible for the final placement of the fire sprinklers or smoke detectors. The coordination of MEP components, including the fire alarm and smoke detectors in both rough and final stages is the responsibility of the general contractor, in accepted construction practice, and in this matter, contractually.

The subject property, having an occupancy classification of hotel, transient, was of R-1 occupancy, per the 2009 IBC. As such, the IBC 2009 required the subject property to contain either single or multiple-station smoke alarms in the sleeping

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areas. Additionally, Code Consultants, Inc. (CCI), a sub-consultant retained by RTKL directed that smoke detectors would be installed in the sleeping areas of the subject property, in compliance with the IBC 2009, and by reference within IBC 2009, NFPA 72.

Smoke Detector Placement

The depiction of the placement of mechanical, electrical, and plumbing (MEP) components in construction drawings generated by the architect are non-binding on the contractor. Many factors direct the final positioning of MEP components including interference with architectural, structural, and other MEP components. The coordination of the final positioning of the MEP components is the responsibility of the general contractor.

During the course of design/construction of the subject property, RTKL, through its interior designer, Looney & Associates, provided drawings for proposed locations of the smoke detector. In the normal course of communicating these design intentions among the parties responsible for determining the final placement of the smoke detectors, more particularly Simplex-Grinnell, as the fire alarm design/build subcontractor to Helix Electric, and after careful consideration as to the placement of the fire/smoke alarm components, a consensus was reached that the location of the smoke detector(s), as provided by RTKL and directed by Simplex-Grinnell, was in compliance with the requirements of all applicable codes, including NFPA 72. As such, RTKL was relying on the MEP subcontractors to determine final placement of the smoke detectors, which was a contractual requirement. As Simplex-Grinnell was the design-build subcontractor for the fire/smoke alarm components, they possessed the most knowledge as to the proper positioning of the aforesaid components.

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Per the contract between HCB and Hyatt, *“Drawings and diagrams for mechanical, plumbing, electrical, fire sprinkler, fire alarm and low voltage Work shall be considered as diagrammatic only and shall not be used for any structural guidance or physical layout.”*

In the construction process, more specifically the fabrication and installation of the mechanical, electrical, and plumbing systems (MEP), plumbing drain, waste, and vent (DWV) are installed first, due to the necessity of draining by gravity; fire protection systems follow, due to the relatively large dimensions of the fire protection mains; mechanical systems such as heating, ventilating, and air conditioning (HVAC), followed by the electrical system conduits and cable runs, due to their relative flexibility. The coordination of said systems is the responsibility of the general contractor.

The process of determining final placement of MEP components involves the use of sketches, which will propose a location, subject to coordination with all affected parties. These sketches are transmitted to said parties through a request for information (RFI). Any determination by the appropriate design professional will be transmitted back to the originator of the RFI for implementation into the project, subject to applicable codes and standards as adopted in the locality in which the project is being constructed, and by default superseding the drawings as prepared by the architect.

At the subject property, HCB issued RFI 527 requesting clarification of the placement of the fire/smoke alarm system components in the guest rooms. To that, RTKL, through its' interior designer Looney & Associates, issued RFI 527R, and drawing DWG ID5.32 indicating specific locations for the positioning of the

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fire/smoke alarm components. In fact, the final placement/positioning of the smoke detectors in the guest rooms were dictated by the Fairfax County, Virginia Building Official.

Conclusions

Based on the review of written materials as listed, Probe is able to conclude the following, to a reasonable degree of engineering certainty:

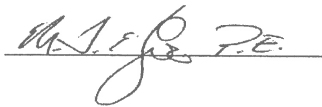
1. RTKL was the architect of record for the design of the subject property;
2. The building code, as adopted by Fairfax County, VA, at the time of the design stage, was the International Building Code 2009 edition;
3. The IBC 2009 edition dictated that the design of the subject property includes smoke detectors in the guest rooms;
4. The IBC 2009 edition referenced NFPA 72 for the location of the smoke detectors;
5. The proposed final placement of the smoke detector(s) was provided by Helix Electric, Simplex-Grinnell, and Harvey-Cleary Builders;
6. The Fairfax County, Virginia Building Official dictated the final placement of the smoke detectors at the subject property;
7. The placement of the smoke detectors at the subject property was in compliance with the directive of the Fairfax County, Virginia Building Official;
8. The smoke detectors were installed in compliance with the tenets of NFPA 72 regarding placement;
9. RTKL was not contractually obligated to coordinate the installation and final placement of the smoke detectors;

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10. RTKL was not contractually obligated to dictate construction means and methods at the subject property;
11. HCB was responsible for the coordination and installation of the fire sprinklers, fire alarm components, and smoke detectors;
12. There was no evidence to substantiate the claim of Daryl L. Ebersole, P.E., that the placement of the smoke detector was the causation of the reported activation of the smoke detector;
13. The design of the subject property, regarding smoke detector placement, was not the causation of the smoke detector activation as reported by the Plaintiff.

Probe reserves the right to amend this report should additional material become available. If there are any questions about the content of this report, or if new information becomes available, please contact our offices.

Submitted by:

A handwritten signature in black ink, appearing to read "M. T. Kilgore P.E.", is written over a horizontal line.

Mark T. Kilgore, Ph.D., P.E.
Principal Engineer

3161 Scenic Oaks Drive, Jacksonville, Florida(770) 318-5208 mtkilgore@probeforensics.com

CURRICULUM VITAE
MARK T. KILGORE, Ph.D., P.E.
Senior Structural /Civil Engineer

Academic Background

Ph.D., Construction Management, University of Florida, August 2016
Master of Engineering, Civil Engineering, University of Florida, 2014
M.S., Building Construction Management Southern Polytechnic State University, 1997
B.S., Mechanical Engineering, Southern Polytechnic State University, 1992

Registrations

Registered Professional Engineer, State of Florida, License No. 84050
Registered Professional Engineer, State of Delaware, License No. 18578
Registered Professional Engineer, State of North Carolina, License No. 045557
Registered Professional Engineer, State of New York, License No. 089416
Registered Professional Engineer, State of Georgia, License No. 036729
Registered Professional Engineer, State of Texas, License No. 112188
Registered Professional Engineer, State of Maryland, License No. 44206
Registered Professional Engineer, Commonwealth of Pennsylvania, License No. PE081408
Registered Professional Engineer, Commonwealth of Virginia, License No. 0402052461
Registered Professional Engineer, State of South Carolina, License No. 32628
Registered Professional Engineer, State of West Virginia, License No. 021439
Registered Professional Engineer, State of Mississippi, License No. 26819

Qualifications

National Registration with the Council of Examiners for Engineering and Surveying (NCEES)
Licensed Electrical Contractor, License No. ER101665
Certified Building Contractor, License No. CBC1252269
OSHA 29 CFR 1910.146 – Permit & Non-permit Confined Space Entry Training, September 2014

Professional Work History

Probe Forensic Engineering, LLC October 2018-present
Senior Structural/Civil Engineer, CED Technologies Inc., 2012 - 2018
Structural Engineer, Aerotek Services / Garver Engineers, Summer 2012
Visiting Assistant Professor, Mississippi State University, 2011 - 2012
Lecturer – Construction Management, University of Tennessee, 2009 - 2011
Principal Engineer, Herrera Construction Company, 2007 - 2010
Principal, The Kilgore Company, LLC, 1988 - 2007

Areas of Expertise

Civil Engineering	Mechanical Engineering
Structural Engineering	Failure Analysis
Construction Site Safety / OSHA	Strength of Materials
Construction Contracting and Management	Concrete Behavior
Construction Scheduling and Estimating	Wind / Water Damage Assessments

BY PROVIDING THIS CURRICULUM VITAE AND FEE SCHEDULE, PROBE AND ENGINEER DO NOT AUTHORIZE USE OF ENGINEER'S NAME OR CURRICULUM VITAE AND FORBID IDENTIFYING ENGINEER AS A POTENTIAL OR ACTUAL EXPERT WITNESS IN ANY JUDICIAL PROCEEDING, WITHOUT EXPRESS WRITTEN AUTHORIZATION AND EXECUTION OF A RETAINER AGREEMENT WITH PROBE FORENSIC ENGINEERING, LLC

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Building Systems Design and Analysis (MEP)
Building Information Modeling (BIM)
Electrical Construction

Building Science
Foundations
Electrical Power Distribution System Design

CURRICULUM VITAE
MARK T. KILGORE, Ph.D., P.E.
Senior Structural / Civil Engineer

Professional Societies

Georgia Construction Industry Licensing Board
Florida Department of Business and Professional Regulation
Member, American Society of Civil Engineers (ASCE)

Professional Honors

University of Florida, Rinker School of Building Construction, Rinker Scholar

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FEE SCHEDULE
Effective October 2018

MARK T. KILGORE, Ph.D., P.E.
Senior Structural / Civil / Engineer
\$345.00 per hour

Time

Engineering time is billed at the same rate for all services including research, review, analysis, testing, inspections, depositions, trial, testimony and travel. There are no charges or administrative fees for opening or maintaining case files.

Expenses

Normal expenses and costs will be charged to the case. These include:

Mileage	\$0.64 per mile
Digital Photographic and CD	\$0.38 per photograph
Laboratory Usage Fee	At cost
Special Equipment for Testing	At cost
Testing Materials	At cost
Travel	At cost
Hotel, Meals, etc.	At cost

Materials and/or other specified expenditures that are required to the case will be charged at cost. Items purchased that are retained by PROBE and usable in other cases will not be charged.

Activities are billed monthly. All balances are due upon receipt of invoice. Rates are subject to change without notice. Unpaid bills are charged a service fee of 1 ½ % per month for unpaid balances.

Probe reserves the right to require a retainer. This retainer is a forward payment of future services for which the client has contracted, retained and agreed upon the engineer's billable rates and expenses.

The receipt of the signed Client Letter of Agreement (LOA) or case file material received by Probe indicates the acceptance of rates and terms and conditions of the LOA.

If there is a question about any item on our fee schedule, please call to discuss your concern. Our ultimate goal is to provide you with the highest level of service possible.

BY PROVIDING THIS CURRICULUM VITAE AND FEE SCHEDULE, PROBE AND ENGINEER DO NOT AUTHORIZE USE OF ENGINEER'S NAME OR CURRICULUM VITAE AND FORBID IDENTIFYING ENGINEER AS A POTENTIAL OR ACTUAL EXPERT WITNESS IN ANY JUDICIAL PROCEEDING, WITHOUT EXPRESS WRITTEN AUTHORIZATION AND EXECUTION OF A RETAINER AGREEMENT WITH PROBE FORENSIC ENGINEERING, LLC

Mark T. Kilgore, Ph.D., P.E.

Principal Publications and presentations

Kilgore, Mark T., "Building Information Modeling: Generating, Reviewing and Communicating the Expectations of the Client, Designer and Constructor"; Dissertation, Rinker School of Construction, University of Florida (2016)

Kilgore, Mark T., "Building Information Modeling: It's Here, Are You Ready for It?" Litigation Management Magazine, Fall 2014, pp. 26-27

Kilgore, Mark T., Subcontractors: Friend or foe? Walking the fine line between asking, directing, cajoling and demanding; American Society for Engineering Management; October 2011

Kilgore, Mark T., "Embodied Energy, Utilize or Waste"; Techniques and considerations for the re-use of existing structural, civil and other building components and systems. American Society for Engineering Management; October 2011

Mark T. Kilgore, Ph.D., P.E.
Trial and Deposition List

Date	Deposition/ Trial	Case Title	Court Location	Docket No.	Attorney
1986	Deposition	Metromont Products v. Clemson University	Clemson, South Carolina		Donald Strand
1988	Deposition	Arnwine v. Knight Development, Inc.	Jonesboro, Georgia		Charles Wilson
1988	Deposition	William Medlin v. John Weiland Homes	Lawrenceville, Georgia		Bill Carmichael
1995	Deposition Trial	Dillinger v. Rainwater Builders	Douglasville, Georgia		Bob W. Brown
1998	Deposition Trial	Pamela Donehue v. First National Bank of Harris County, Georgia	Hogansville, Georgia		Pamela Hawkins
2002	Deposition	Federal Housing Administration v. Jonathan Huggins	Adairsville, Georgia		Barbara Kaminsky
2003	Deposition	Pinkerton and Laws, Inc. v. Aiken Hospitality Group	Aiken, South Carolina		Carlton Baker
2004	Deposition Trial	Pinkerton and Laws, Inc. v. Huntsville Hospitality, LLC	Huntsville, Alabama		Timothy Sides
2004	Deposition Trial	Federal Housing Administration v. Rhonda Batts	Cartersville, Georgia		Barbara Kaminsky
2005	Deposition Trial	Federal Housing Administration v. Priscilla Johnson	Canton, Georgia		Barbara Kaminsky

Mark T. Kilgore, Ph.D., P.E.
Trial and Deposition List

Date	Deposition/ Trial	Case Title	Court Location	Docket No.	Attorney
2007	Deposition	Herrera Construction v. United States	Jacksonville, Florida		Robert Avera
3-20-2013	Deposition CED Case No. 91868.1	Angelo L. DiLuzio v. The Village of Yorkville, Ohio, et al.	In the United States District Court for the Southern District of Ohio Eastern Division	Civil Action No. 2:11 cv 1102	Robert H. Stoffers Mazanec, Raskin & Ryder Co., L.P.A.
6-21-2013	Deposition CED Case No. 9724.1	The Council of Unit Owners of Windswept Condominium Association v. Robert W. Schumm v. Ocean Atlantic Associates, VII, LLC	In the Superior Court of the State of Delaware in and for Sussex County	C. A. No. S12C-08-011 RFS	Victoria K. Petrone Logan & Petrone, L LC
10-17-2013	Deposition CED Case No. 9579.1	Ferris v. D. R. Horton, Inc. v. Athena Stone Corporation	Superior Court of the State of Delaware in and for New Castle County	C.A. No.: N11C-11-221 CHT	Robert K. Pearce Ferry, Joseph & Pearce, P.A.
1-13-2014	Deposition CED Case No. 9852.1	Norman Jones v. Mona Electric Group, Inc.	In the Superior Court of the District of Columbia Civil Division	Civil Action No. 2012 CA 009199	Jeaneen Johnson Semmes, Bowen & Semmes
1/21/2014	Deposition CED Case No. 10035.1	Robyn G. Dickey v. Hines VAF II 2100 M Street, LP t/a 2100 M Street Holdings, L.P., et al.	In the Superior Court of the District of Columbia Civil Division	Civil Action No. 2013 CA 001969B	Patricia M. Thornton Bacon, Thornton & Palmer, LLP

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Trial and Deposition List

Date	Deposition/ Trial	Case Title	Court Location	Docket No.	Attorney
2/26/2014	Deposition CED Case No. 9639.1	Lisa Ann Martinez v. Towne Estates Condo. Owners Assoc., Inc., et al.; Towne Estates Council; Conway Management Group, et al.; Terrance Bowman; Janelle Stevenson; Curtissa Mack / Bowman & Stevenson, Third-Party Plaintiffs v. Pettinaro Constr. Co., Inc.; Dennis Home Inspections, Inc., et al.	In the United States District Court for the District of Delaware	Civil Case No.: 1:12-cv- 779-RGA	Joseph Naylor Swartz Campbell LLC
6/23/2014	Deposition CED Case No. 9219.1	Empire Fire and Marine Insurance Co. a/s/o James & Charlene Dautenhahn and State Farm Fire and Casualty Co. a/s/o Victor & Debra Trunzo v. Royal Plus Electric, Inc.	In the United States District Court for the District of Delaware	No.: 13-332- RGA	Roger D. Landon Murphy & Landon
7/23/2014	Deposition CED Case No. 9996.1	State Farm a/s/o Thomas Grau and Doris Rackl and Kathleen Moorman v. Hilltop Electric Company, et al.	In the Circuit Court for Baltimore County, Maryland	CA No.: 03-C- 13-003852 OT	Douglas K. Schrader Law Offices of Greenspan, Hitzel & Schrader

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1/16/2015	Deposition CED Case No. 92076.1	John R. Bremke, et al. v. Karl E. Sherck, et al.	In the Court of Appeals of Ohio, Ninth Judicial District	C.A. No. 12CA010303	Howard T. Lane Fauver, Keyse-Walker & Donovan
1/27/2015	Trial CED Case No. 9219.1	Empire Fire and Marine Insurance Co. a/s/o James & Charlene Dautenhahn and State Farm Fire and Casualty Co. a/s/o Victor & Debra Trunzo v. Royal Plus Electric, Inc.	In the United States District Court for the District of Delaware	No.: 13-332- RGA	Roger D. Landon Murphy & Landon
5/4/2015	Deposition CED Case No. 10502.1	Potomac Electric Power Company v. GT Contracting Corporation	In the Superior Court for the District of Columbia Civil Division	Civil Action Nos. 2014 CV 3003B & 3004B	James S. Liskow DeCaro, Doran, Siciliano, Gallagher & DeBlasis
8/7/2015	Deposition CED Case No. 52468.1	C.J. Fucci, Inc. v. North Carolina Granite Corp. and BFR & Associates, Inc. Silvestre Pereira and Rosa Pereira v. North Carolina Granite Corp. and BFR Associates, Inc.	Superior Court Judicial District of New Haven at New Haven	NNH-CV-09- 6004639 S NNH-CV-09- 5031427-S	Victoria Metaxas LeClair Ryan
9/2/2015	Deposition CED Case No. 10409.1	Emmalee Zimmerman v. Truland Systems Corporation	Superior Court of the District of Columbia Civil Division	Civil Action No. 2014 CA 001326 B	William Lightfoot Koonz, McKenney, Johnson, DePaolis & Lightfoot

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3/13/2016	Deposition CED Case No. 11256.1	Ryan Peusch, et al. v. Stavrou Companies, LLC, et al.	In the Circuit Court for Baltimore City	Case No.: 24- C-15-003353	Christopher Staiti Staiti & DiBlasio, LLP
4/20/2016	Deposition CED Case No. 11256.1	Ryan Peusch, et al. v. Stavrou Companies, LLC, et al.	In the Circuit Court for Baltimore City	Case No.: 24- C-15-003353	Christopher Staiti Staiti & DiBlasio, LLP
9/20/2016	Deposition CED Case No. 9894.1	Kristine Korva v. Fort Myer Construction Corporation	In the Superior Court for the District of Columbia (Civil Division)	Civil Action No.: 2014 CA 006658 B	Kelly J. Fisher Koonz, McKenney, Johnson, DePaolis & Lightfoot
1/11/2017	Mediation CED Case No. 11474.1	Lowell Young and Joan Young, h/w v. Home Depot U.S.A., Inc. et al. v. Nate's On The Go Construction, Inc.	In the United States District Court for the Eastern District of Pennsylvania	Civil Action No. 15-5436	Kevin Cornish High Swartz LLP
5/9/2017	Trial CED Case No. 10409.1	Emmalee Zimmerman v. Truland Systems Corporation	Superior Court of the District of Columbia Civil Division	Civil Action No. 2014 CA 001326 B	William Lightfoot Koonz, McKenney, Johnson, DePaolis & Lightfoot
9/6/2017	Deposition CED Case No. 11781.1	Georgia Kay Ladd, et al. v. 89 WCA Property, LLC, et al.	In the Circuit Court of Maryland for Anne Arundel County	C-02-CV-16- 000251	Jonathan R. Clark McCarthy Wilson LLP

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Date	Deposition/ Trial	Case Title	Court Location	Docket No.	Attorney
2/20/2018	Deposition CED Case No. 72504.1	The Peninsula at St. John's Center Condominium Association, Inc. v. The Auchter Company, et al.	In the Circuit Court of the Fourth Judicial Circuit, In and For Duval County, Florida	2013-CA-6582 Division CV-G	Michael Childers Boyd & Jenerette
4/9/2018	Trial CED Case No. 10217.1	Jaigobin / Bridge Water Main Claim 88823	In the Circuit Court of Montgomery County, Maryland	428625-V	William Foote Law Offices William D. Foote
5/22/2018	Deposition CED Case No. 73440.1	Oak Meadows v. Watermark Construction, et al.	In the Circuit Court of the Eighteenth Judicial Circuit in and For Brevard County, Florida	05-2014-ca- 049677- XXXX-XX	Frank H. Gassler, Esq. Banker Lopez Glasser, P.A.
6/19/2018	Deposition CED Case No. 73461.1	Offices at Hampton Village v. Donpat Gate Parkway, et al.	In The Circuit Court Of The Fourth Judicial Circuit, In And For Duval County, Florida	16-2015-CA- 004778	Jessica R. Creegan, Esq. Wright, Fulford, Moorhead & Brown, P .A.
8/16/2018	Deposition CED Case No. 12030.1	American Eagle Express, Inc. d/b/a AEX Group v. Engineering and Technical Consultants, Inc., et al.	In the Circuit Court for Howard County, Maryland	13-C-17- 113562 OT	Michael J. Marinello, Esq. Kagan Law Group

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9/6/2018	Deposition CED Case No. 73086.9	Titan Florida LLC v. Brand Energy Solutions LLC, et al.	In the Circuit Court of the 11th Judicial Circuit In and For Miami-Dade County, Florida	2017-007931- CA-01	Randy R. Dow Boyd & Jenerette, P.A.
9/28/2018	Deposition CED Case No. 92584.1	Rama Arla and Mohana Arla vs. RTS Builders, LLC and Bittners, LLC	Jefferson Circuit Court Division Thirteen (13) Judge Ann Bailey Smith	No. 15-CI- 03260	Jason E. Abeln, Esq. Garvey, Shearer Nordstrom, PSC Louisville, KY
12/13/2-18	Deposition Probe Forensics Case No. MD- 2018-09-004	AMC East Communities, LLC v. Sundt Construction, Inc.	United States District Court, District of Maryland, Southern Division	8:17-CV- 03598-TDC	
2/27/2019	Deposition Probe Forensics Case No. FL- 2018-08-001	18201 Collins Avenue Condominium Association v. Coastal Construction Group of South Florida	In the Circuit Court of the Eleventh Judicial Circuit- Miami-Dade County, Florida	2016-03283- CA-01	Cole, Scott & Kissane, P.A. Miami, Florida